



THE IMPACT OF DIGITAL TECHNOLOGIES

Technologies can help make our world fairer, more peaceful, and more just. Digital advances can support and accelerate achievement of each of the 17 [Sustainable Development Goals](#) – from ending extreme poverty to reducing maternal and infant mortality, promoting sustainable farming and decent work, and achieving universal literacy. But technologies can also threaten privacy, erode security and fuel inequality. They have implications for human rights and human agency. Like generations before, we – governments, businesses and individuals – have a choice to make in how we harness and manage new technologies.

➤ A DIGITAL FUTURE FOR ALL?

Digital technologies have advanced more rapidly than any innovation in our history – reaching around **50 per cent** of the developing world's population in only two decades and transforming societies. By enhancing connectivity, financial inclusion, access to trade and public services, technology can be a great equaliser.

In the health sector, for instance, AI-enabled frontier technologies are helping to save lives, diagnose diseases and extend life expectancy. In education, virtual learning environments and distance learning have opened up programmes to students who would otherwise be excluded. Public services are also becoming more accessible and accountable through blockchain-powered systems, and less bureaucratically burdensome as a result of AI assistance. Big data can also support more responsive and accurate policies and programmes.

However, those yet to be connected remain cut off from the benefits of this new era and remain further behind. Many of the people left behind are women, the elderly, persons with disabilities or from ethnic or linguistic minorities, indigenous groups and residents of poor or remote areas. The pace of connectivity is slowing, even reversing, among some constituencies. For example, globally, the proportion of women using the internet is **12 per cent** lower than that of men. While this gap narrowed in most regions between 2013 and 2017, it widened in the least developed countries from 30 per cent to 33 per cent.

The use of algorithms can replicate and even amplify human and systemic bias where they function on the basis of data which is not adequately diverse. Lack of diversity in the technology sector can mean that this challenge is not adequately addressed.

➤ THE FUTURE OF WORK

Throughout history, technological revolutions have changed the labour force: creating new forms and patterns of work, making others obsolete, and leading to wider societal changes. This current wave of change is likely to have profound impacts. For example, **the International Labour Organization** estimates that the shift to a greener economy could create 24 million new jobs globally by 2030 through the adoption of sustainable practices

in the energy sector, the use of electric vehicles and increasing energy efficiency in existing and future buildings.

Meanwhile, reports by groups such as McKinsey suggest that 800 million people **could lose their jobs to automation by 2030**, while polls reveal that **the majority of** all employees worry that they do not have the necessary training or skills to get a well-paid job.

There is broad agreement that managing these trends will require changes in our approach to education, for instance, by placing more emphasis on science, technology, engineering, and maths; by teaching soft skills, and resilience; and by ensuring that people can re-skill and up-skill throughout their lifetimes. Unpaid work, for example childcare and elderly care in the home, will need to be better supported, especially as with the shifting age profile of global populations, the demands on these tasks are likely to increase.

➤ THE FUTURE OF DATA

Today, digital technologies such as data pooling and AI are used to track and diagnose issues in agriculture, health, and the environment, or to perform daily tasks such as navigating traffic or paying a bill. They can be used to defend and exercise human rights – but they can also be used to violate them, for example, by monitoring our movements, purchases, conversations and behaviours. Governments and businesses increasingly have the tools to mine and exploit data for financial and other purposes.

However, personal data would become an asset to a person, if there were a formula for better regulation of personal data ownership. Data-powered technology has the potential to empower individuals, improve human welfare, and promote universal rights, depending on the type of protections put in place.

➤ THE FUTURE OF SOCIAL MEDIA

Social media connects **almost half of the entire global population**. It enables people to make their voices heard and to talk to people across the world in real time. However, it can also reinforce prejudices and sow discord, by giving hate speech and misinformation a platform, or by amplifying echo chambers.

In this way, social media algorithms can fuel the fragmentation of societies around the world. And yet they also have the potential to do the opposite.

➤ THE FUTURE OF CYBERSPACE

How to manage these developments is the subject of much discussion – nationally and internationally – at a time when geopolitical tensions are on the rise. The UN Secretary-General has warned of a ‘great fracture’ between world powers, each with their own internet and AI strategy, as well as dominant currency, trade and financial rules and contradictory geopolitical and military views. Such a divide could establish a digital Berlin Wall. Increasingly, digital cooperation between states – and a universal cyberspace that reflects global standards for peace and security, human rights and sustainable development – is seen as crucial to ensuring a united world. A ‘global commitment for digital cooperation’ is a key recommendation by the **Secretary-General’s High-level Panel on Digital Cooperation**.



FOR MORE INFORMATION



- 🔗 [The Sustainable Development Goals](#)
- 🔗 [The Age of Digital Interdependence: Report of the UN Secretary-General’s High-level Panel on Digital Cooperation](#)
- 🔗 [ILO | Global Commission on the Future of Work](#)
- 🔗 [Secretary General’s Address to the 74th Session of the UN General Assembly](#)
- 🔗 [Secretary General’s Strategy on New Technology](#)